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VACAVALLEY RADIO CLUB

VACAVILLE , CALIFORNIA

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November 2013

Message Fom Marcus,

This article is just my opinion on the subject and not my message to the club itself unlike previous writings I've forwarded to the newsletter editor. I was and had planned to put on a good worthwhile demo of the digital modes with the October regular club meeting, but not only did I not get off from a customer's jobsite over in Napa until close the club meeting time, but my digital hardware just wasn't feeling good – more like sick with the flu like us humans get! And then my computer started having flu like symptoms and it too needed the doctor's help from an office visit. What I can and will tell anyone who is thinking of or has already immersed their station into the digital modes is this: Do your research carefully before buying your station a digital hardware device. Sure, eHam.net has the reviews, but dig a little deeper before your cash and you part ways with each other. Case in point: I bought a Tigertronics SignaLink USB device directly from the factory about 3 years ago when I was more flush with cash than I am now and never thought anything else of the device until problems starting cropping up after putting the device into operation this past summer.

I had previously downloaded the HRD 5.24.0.38 version software that also includes the DM-

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CQ-Meow
CQ-Meow

Meeting notes

VACA VALLEY RADIO CLUB
TREASURER'S REPORT
AS OF October 9, 2013

	GENERAL FUND	REPEATER FUND	TOTAL GEN/RPTR
YTD Paid	149.48	200.00	349.48
YTD Received	364.00	238.00	602.00
Difference	214.52	38.00	252.52
YTD	2021.66	854.00	2875.66

Several members of the club gathered at the Elmira Fire Station at about 6:45p.m. for the meeting. President Marcus MacLean, KI6WDX was delayed due to work commitments.

A demonstration of PSK-31 operation using actual equipment was scheduled to be done by Marcus and Brian, KI6BXP.

While we were waiting for the President's arrival, Brian decided to set up the equipment outside as a portable station including the antenna on a 40-foot fiberglass mast. A quick review of the procedures and actual operating of PSK-31 created a lot of interest as the intricacies of operation were demonstrated.

Marcus arrived and the board meeting was called to order at about 8:15 p.m.

A discussion of the free offer of a 40-foot tower ensued. Hewitt, K6HEW discussed the expenses involved with transporting, permits, and installation of the tower. It was decided to table the discussion until the next meeting.

Nominations for the election of officers of the VacaValley Radio Club were brought up and tabled until the November 14 meeting.

After the board meeting the demonstration of the PSK operation continued until 9:45 P.M.

The meeting was adjourned at about 10:00 p.m.

Feedline-from pg-1..Cont

780 software within it and while the help files are both imbedded in each program that can either be printed out for easy reference points or just open up that part of the program one is using to see what information is needed or is not understood. After awhile of running the HRD & DM-780 programs along with using my SignaLink device, not only was I to spend a lot of time typing in information with each QSO TX message, but the device was starting to give me issues. What other hams told me was that either my signal was overmodulated or the signal was too wide or that my entire QSO was splattering very bad. Very Bad!! It was at this point where I bought a binder and printed the help files (double sided), used my 3 hole binder punch and fitted everything about both the HRD and the DM-780 software program into the lone binder. Then I started reading and what I quickly found out is that how both programs are written, to understand the "how" and the "why" of the PDF instructions did take some time and more than once did I have to re-read what I had just read to clearly understand how each software program was written. Once one has a clear understanding of the written program, fine tuning each program the likes of the ham is very easy and really quite simple. One of the nice things that either program has is an automatic "save" mode because unlike other software programs, neither has a "SAVE" button. As soon as a change is made, it is automatically saved or when one clicks on the "OK" button that in it is the hidden "save" feature!

So in running the Ham Radio Deluxe software free version mention at the beginning of the above paragraph, I was able to set and/or adjust the colors of the HRD controller program so that no one part on the screen in anyway blends into another area of the screen layout. Sure there is the default layout, but the program can be tailored to what the operator likes or wants the screen layout to look like. In using the HRD controller, I can control my Yaesu FT-450 rig from my computer and my mouse. My computer mouse is different in that not only has it four (4) buttons, but it has the track ball in addition to a rotating ring in between the track ball and the 4 buttons that allows me to move up or down the chosen frequency and of the chosen frequency, the program allows the operator to select the fine tuning aspect and sometimes this feature has come in handy when the need to fine tune the frequency to narrow down the frequency in which the QSO is taking place.

The only band lacking in the free HRD version is the 6 meter band availability. If one has a transverter device, the HRD program will interface itself with that device and the same holds true for those hams that have a WinKeyer device. The only item that I cannot control is my external tuner. The program will control the radio's internal tuner, but nothing external and maybe this feature and the 6 meter band feature is part of the current "paid for" version that cost $100.00. Since most radios sold in today's marketplace and within the last 10 years are menu rich in their ability to give greater ease to the operator, the HRD program is quite capable of handling the menu driven parts of a given radio. Like my Yaesu FT-450.

As for the digital mode software program, DM-780, it too can be setup to the likes of the station operator and the program includes a lot of digital mode programs such as BPSK31, MFSK-64, MT-63, Hellscriber, Olivia and Contestia to name a few. In using the digital mode of PSK31, there are two platforms> BPSK-31 and QPSK-31 that can run in either USB or in LSB with the only exception in using the QPSK-31 mode that requires both operators to use the same mode

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VACA VALLEY RADIO CLUB--2013

ELECTED OFFICERS

President: Marcus K. Maclean, KI6WDX
Vice President: Chris Jones, KD7TQO
Secretary: Skip Lawson, AF6HC
Treasurer: Bob Hewitt, K6HEW

BOARD OF DIRECTORS

Director: Skip Lawson, AF6HC
Director: Antonio Del Rio, N6GZB
Director: Arthur Miller, KI6UXE
Director: Richard Craig, KJ6MIB

APPOINTED POSITIONS

Net Control Chairperson: Chris Jones, KD7TQO
Club Activities Chairperson: Board of Directors
Newsletter Editor: Jerry Bowen, KJ6SCC
Newsletter Publisher & Distributor: Bob Hewitt, K6HEW

since the "Q" can't cross over the "B" and vice versa including the SSB mode, too. But the DM-780 program allows the ham to customize how his/her station is to operate. I got away from the default paths and created my own the way I wanted so that when I'm in a QSO with another ham wherever he/she is in the world, the information I want that ham to have is easy to understand when I send the digital text message. One nice feature is the ability to create a "stop" in the message that only the computer "sees" at the end of the sent message. The DM-780 program also includes a log book and QRZ.com lookup as well. And the waterfall colors can be tailored to the operator's liking, too. I have my waterfall colors set in such a way with the colors I wanted so I know when a QSO or a CQ is being sent. For a free software program and that of the main program of the HRD, what is within each is really too good to be believed. The only down side to everything is that there is no program support for either software unless you buy the current $100 version. But if one prints out the PDF help files in the same manner as I did using both sides of a given page and stores the help information in a binder for easy reference, why then would anyone want to pay $100 for the current program that does not have that many program changes at all unless you are a "diehard contester or a extreme DX hunter", then maybe parting with $100 is suitable.

So if any club member wants the free HRD software that was taken off of the HRD website at the first of September, contact me either by email at: freonfiz@comcast.net or just call me at 707-434-1267 and leave a message about the desire of having the software and I'll burn a CD and get it to you! The JT65-HF is another great software item.

A CD burned for you will likely include other radio related software programs and if getting into the digital mode is a new gig, I would highly recommend buying the ARRL book "Get on the Air with HF Digital" written by Steve Ford, WB8IMY because of how it is written and of the valuable information it contains. As for my Tigertronics SignaLink USB device, if you are planning on buying one or already have it, seriously consider buying the mini PC jumper board that sells for under $10 because as I found out, it provides by far better operations of the USB device than do the jumper wires the device comes with. The mini PC jumper board pins seem to fit much tighter into the JP1 socket board than the wires do, By installing this mini jumper board, the issues and problems I was having using the jumper wires completely disappeared. Plain & Simple!

73

Marcus K Maclean, KI6WDX

President

THE VVRC WELCOMES YOU

The Vaca Valley Radio Club has proudly served the Northern Solano County Area since 1988. We pride ourselves in providing a friendly place for radio amateurs to meet and improve their operating skills.

We participate in public service events throughout the year and are always ready to assist with communications during times of emergency.

Browsw our website for more information about our club. If you have any questions please e-mail us at w6vvr@w6vvr.net or call 707-448-5665 for assistance

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988. General Meetings: 2nd Thursday of each month at 7:30 PM 420 Elmira Fire Station.

Wheelchair accessible

Visit the Repeater online courtesy of Bob K6HEW at: vacavalleyradio.net

Club repeater in Vacaville:W6VVR 145.470 MHz(-) pl 127.3
The W6VVR net call is Tuesday evenings at 8pm on the club repeater. All are invited to participate in this weekly meeting on the air. 73!

Additional local repeaters
WV6F 224.200(-)
WV6F 440.025(+)
WV6F 1291.900(-)

Going Solo in Yolo for CQP

By Jerry Olive, KD6WKY

A few years ago after working two CQP County Expeditions with my good friend Ralph Jones AA6GM in Southern California it was my turn to find a location suitable for a CE that was rare, doable, and located in a place where I could drive a car. Knowing Yolo County had been under represented in years

past and that I had a client in Winters, CA with a 60 acre walnut and prune orchard, I decided to get permission from him to set up a station there for CQP. The location was open and flat as well as close to home; about 30 minutes from my QTH.

For the past few years we had been setting up our K6Y station over there, each year doing improvements to the station to increase our score all the while keeping it fun. CQP 2013 was the third year at the site and with the addition of a three element Super Antenna™ YP-3 beam my claimed score jumped over 40% to just over 68,000 with 477 contacts and 56 mults. I missed MS and NT for a sweep.

I acquired the YP-3 last winter on eBay and had tested it making notes and modifications to the mast assembly prior to CQP. My other antenna was my trusty Buddipole™ that I used on 40m and 80m very nicely. I'll explain later.
This year for the first time I operated single operator, low power, I went Solo in Yolo!

I was able to set up the station in about an hour leaving the YP-3 for last. In my haste I set up the YP-3 incorrectly using the wrong traps and had a short in the banana clip connection at the same time. It took me 45 minutes to analyze the problem and correct my initial assembly mistakes. I made my first contact at 1641 UTC. Someday I'll be QRV at 1600, but this was the best start time I have had in years from a CE.

I spent the first three hours on 15m SSB working east of the Mississippi and into Europe, that CQP advertising in EU

NET CONTROL OPERATORS

1st week of month-Jerry Bowen; KJ6SCC
2nd week of month-Richard Craig; KJ6MIB
3rd week of month-Chris Jones; KD7TQO
4th week of month-Marcus MacLean; KI6WDX
On months with 5 weeks-Bob Hewitt; K6HEW

paid off nicely. When I reached 100 contacts on SSB I switched over to 15m CW for the rest of the afternoon. Just before new day, I took a break and broke out the Buddipole™ setting it up among the trees. The walnuts are spaced 20' x 26'; plenty of room!

In the late afternoon and early evening I moved to 40m both CW and SSB working a steady flow of stations on a run frequency. About 0100 UTC my wife Cora arrived with dinner; a nice warm entrée of chicken apritada and rice. I added walnuts for fun. We ate dinner as the sun set through the walnut trees on a nice October evening in Yolo County, it was great! When we finished dinner I got back on the air and built a nice little pile up on 40m CW while Cora walked the rows of walnut trees picking up nuts that were left on the ground from the sweeper that had just harvested this stand of trees earlier in the week. She left about 0500 UTC with a shopping bag of walnuts and a promise to send daughter Julie back Sunday afternoon to help me take down K6Y.

At about 0330 UTC I reconfigured the Buddipole™ to the low band 80m vertical configuration featuring the 80m coil and 66' counterpoise wire. Walnut trees are perfect for this set up. With the 9' vertical antenna up 20' at the base, the counterpoise wire needed to be at least 5' off the ground with a right angle turn at the 33' mark. The tree branches were a perfect place to lay the wire as I unwound it and made the turn. I had a 1.2:1 match with a nice 60 KHz low spot on 80m for both CW and phone with that antenna. That antenna was awesome on 80m.

I went to sleep about 0630 UTC when the Q rate dropped off and I was starting to shiver; my core temperature was dropping a bit. After about ten minutes in my retired US Army medium cold sleeping bag, I was warm and asleep. Knowing how to stay warm, dry and be comfortable outdoors is important.

On Sunday morning after a quart of hot coffee I could see well enough to adjust my YP-3. I reconfigured it for 20m and ran it there all day picking up both new contacts and third

and fourth contacts from stations I had worked on other bands. While operating, I worked in some oatmeal and scrambled eggs using my canteen cup for cooking. Unfortunately I forgot to bring a pan so I made it work with what I had.

Everything I used one person could set up and take down. I avoided using antennas designed for permanent installation favoring portable antennas designed for temporary use. My generator was a used Kipor IG1000 which has plenty of power for a Kenwood TS-570D with peak power usage at only 350 watts when everything was running. Everything you see in the photos fits into a Toyota Corolla so going anywhere reasonable is possible.

Set up time when everything is done right is about 90 minutes including staking guys and assembling antennas. Take down runs about two hours because I am careful repacking antennas and radio gear, cleaning as I go. Camping is dirty.

If you are kind of bored working CQP from home and want to try something different, maybe set a record in a rare county, work a County Expedition and help those light orange counties that Bob N6TV illustrates go dark orange full-time in 2014. K6Y will be back in Yolo in 2014 working for a six figure score.

License Exam To Be held December 7

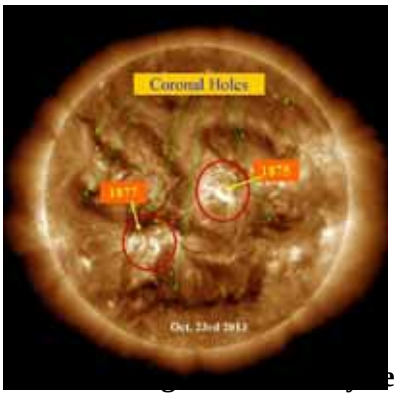
An all license class exam will be held in Fairfield at the office of Jerry Olive KD6WKY, 1530 Webster Street, Suite A, Fairfield, CA on Saturday, December 7 at 9:30am.

Walk-in's are welcomed. Please have $15 cash exact change with you if you plan to test. This is an unsponsored test session, VEs have already been arranged. Call Jerry at 707-422-6777 (days) if you have any questions.

Jerry Olive

THE BIT BUCKET

The largest flare of Cycle 24



e 24 was produced today measuring an M9.3 from sunspot region 1877 which is located at the Sun's meridian **and is Earth directed.** The remaining 5 M-class flares have set off in the last 24 hours from sunspot region 1875 which is also centered and solar events are Earth directed.

In addition to these six events, eight (8) coronal holes have developed which will produce a large discharge of charged particles along with the incoming solar flares. I expect significant geomagnetic storms to occur beginning Oct. 25th and will likely produce lower latitude aurora's - perhaps dipping down below the 45th parallel.

There is a better than 35 percent chance of an X-class flare occurring from sunspot region 1875 and a 30 percent chance from region 1877.

Over the next 48-72 hours, watch for the occurrence of extreme weather events. This could be the acceleration of current tropical storms - increased earthquake or volcanic activity - or unusual shifts of wind and temperatures.

Bob Hewitt, K6HEW, to Speak At Vallejo Radio Club

NBARA Christmas Dinner Speaker Bob Hewitt will be presenting a Christmas Dinner with an extensive raffle and guest speaker this year.

This event will take place on our regular club meeting night of December 23.

Bob Hewitt has been invited as our guest speaker. We will be sending invitations to the Benicia, Napa and Vacaville-Fairfield clubs to join us for this event.

The cost will be $12 dollars per person and a RSVP is mandatory. Please call Jennifer at 642-5863 or on 145.310 to RSVP

When The Cat ran out of Gas

By Crash Explorer David Trojan, Dec 2010

On 14 April 1952, F8F-1 Bearcats, Bureau numbers 95151 and 95228 assigned to VF-886 took off from NAS Olathe, Kansas on a cross country training flight. The flight did not end as planned. The Bearcat was the replacement for the Navy's Hellcat, but WWII ended before it could be used. At the end of WWII the Bearcat was the fastest single engine prop fighter plane in the Navy and the world. It sported a Pratt & Whitney R-2800 engine, driving a huge 4 bladed propeller, with a top speed of 450 knots and a service ceiling of 35,000 ft. The plane was strong, but lightweight. Without the use of a fuel drop tank, only 2 hours of flight were possible. After production F8F-1 Bearcat, Bureau # 95151, was immediately placed in storage at NAF Litchfield Park Arizona were it stayed in storage for months before it was assigned to NAS Olathe for reserve pilot training. NAS Olathe was an operating station of the Naval Reserve Training Command, providing facilities for fourteen squadrons of the Naval and Marine Air Reserve. The two Bearcats flew from NAS Olathe, Kansas to Kirkland AFB New Mexico without incident. The flight then departed Kirkland AFB NM for NAF Litchfield Park AZ for the final leg of the planned flight. The flight was approximately 30 minutes out of Kirkland AFB when LTJG Bill B. Webster, the pilot of 95151 noted his gas gauge indicated 30 gallons of fuel remaining and reversed course back to Kirkland AFB. Only four minutes later, LTJG Bill B. Webster changed his mind and again reversed course to continue on with the flight to Arizona because he thought his gas gauge now indicated 120 gallons. LTJG Bill B. Webster reported that the Bearcats fuel warning light flashed intermittently for some time, but he ignored it because he thought it was caused by rough "*bumpy air*". Next, the flight reported over Winslow AZ with the bearcat gas gauge indicating 80-90 gallons of fuel remaining. The pilot thought he could "*stretch it*" to NAF Litchfield Park and continued on. Twenty-nine minutes later at approximately 1740 CST the flight was 40 miles NNE of Phoenix at an altitude of approximately 9500 feet when the engine on Bearcat 95151 quit running. The gas gauge indicated empty with the low fuel warning light on most of this time.

When the Bearcat ran out of gas, Pilot LTJG Bill B. Webster decided to ride the aircraft down over the mountainous terrain and try to land on a mesa below. The pilot properly turned off the battery, radio, ignition switches, and gasoline selector valve before impact. The pilot left his wheels up and used full flaps in the abeam position instead of partial flaps as recommended by the Pilot's Handbook for dead stick landings in the F8F Bearcat. This error very nearly cost him his life as the aircraft settled so rapidly that it was necessary to pull in a near stall to get up onto the mesa that he was trying for. This maneuver caused the left wing to drop and strike a cattle fence post on the edge of a 1200 foot drop-off into the canyon below. The impact of hitting this post tore off the left wing tip and cart wheeled the aircraft up onto the mesa where it slid 270 feet from the edge over large boulders and brush before coming to a stop. Fire broke out almost immediately, but luckily the pilot was uninjured thanks to his shoulder straps and safety belt and was able to exit the wreckage before the fire consumed it. The aircraft had landed in an almost inaccessible location at an altitude of 5200 feet and was almost completely destroyed by the fire after the crash landing.

The pilot had escaped death, but was now stranded in the mountains in Arizona. The remaining Bearcat in the flight orbited the crash site for almost 20 minutes before departing after calling for rescue. Shortly thereafter, the 4th Air Rescue Squadron from March AFB parachuted two medics to reach the crash site. They found the pilot uninjured so they established a camp for the night to await rescue themselves. The historical records do not say how long the trio was stranded atop the mesa, but it is believed that they were there for only a short time.

The remote location of the crash site and the condition of the wreckage prevented any analysis of the aircraft to determine if mechanical failure was a contributing cause of the accident. It was the accident investigation board's opinion that the primary cause of

the accident was the pilot's failure to check his fuel supply before taking off from Kirkland AFB. Contributing to the error was the fact that one fuel chit covered both aircraft causing some confusion as to how much fuel was put into each aircraft. Apparently, the pilot did not check his fuel gauge and obviously did not check the fuel tank personally and visually to see if it was filled. The pilot also failed to adhere to course reversal procedures knowing that his fuel was low. Compounding the pilot's error was his failure to land at Winslow AZ to check his fuel supply when he had the opportunity and the fact that the pilot knew that the leg of the flight was to be over extreme mountainous and desolate terrain. His decision to ride the plane down was also contrary to general training and called into question. By 1956, the last Bearcats were taken out of service and stored or scrapped, having been replaced by the new age of jets.

Visiting the crash site was like taking a step or should I say hike back in time. You could still see the fence post that the Bearcat hit and knocked down near the edge of the mesa. Then you could clearly follow the trail of debris, including parts of the left wing tip 270 feet to where the aircraft came to rest. Lastly, you can still see the melted aluminum from when the plane burned. There was an empty can of the ever present yellow paint that was used to mark the wreckage at the site indicating that there were some big pieces that survived the crash. The Navy had abandoned the wreck as "inaccessible" but unfortunately salvagers got to it at some point and most of the aircraft was missing. There was no evidence that the wreck was scrapped and melted down for its valuable aluminum because heavy steel parts like the landing gear were missing. The site looked more like the remaining big pieces of wreckage were hauled off somewhere.

Fortunately left behind at the crash site were a few scraps of the plane and almost all the radio equipment. None of the equipment had any identification plates indicating what they were. After my visit to the scene, I decided to research all the radio equipment installed on a F8F-1Bearcat and then compare it to what was found at the crash site. I was able to confirm the identity of two of the boxes and I also identified parts from a third. The aircraft was equipped with an AN/ARC-5 Command Radio Set for communication between aircraft and back to the base, and also had some basic navigation equipment. Despite the use of vacuum tubes, they were compact, rugged and lightweight and they even survived the crash of the aircraft! I even found some vacuum tubes unbroken inside of the radios. Below is the comparison photos of what the equipment looked originally compared to what I found at the crash site.

R-23A/ARC-5 R-23A/ARC-5 as found, front and back views
The R-23A/ARC-5 was the Navigation Receiver (Beacon Band),

The R-4A/ARR-2A Homing Receiver operated on 234 – 258MHz. Western Electric developed the AN/ARR-2 as an all-in-one homing receiver that replaced the broadcast band receiver and external homing adapter and had other enhancements as well. The R-4A/ARR-2 used the same 28VDC dynamotor as the AN/ARC-5 sets and was controlled by special AN/ARC-5 control boxes.

Parts, including dials and internal components were found belonging to the RT- 18/ARC-1 VHF transmitter-receiver. During and after WWII, the Navy proceeded to use VHF-AM for command functions with the AN/ARC-1, it had 9 channels (xmit/rcv), and one guard channel, all crystal controlled. Frequency range 100-156

RT-18/ARC-1 VHF transmitter-receiver

Top-left-RT-18/ARC-1 VHF transmitter-receiver
RT-18/ARC-1 only parts found included front dials

MHz, AM mode only. Transmitter output was only 8 watts.

Most crash explorers ignore the radio equipment and pass it by. I like to know what equipment was installed on the particular aircraft, how it was used and what remains at the crash site. I also like to wonder about what frantic calls were made over the radio as the aircraft was going down before the crash. Every wreck has a story to tell and every piece of radio equipment also has a story. This Bearcat F8F-1 wreck sure did have an interesting story.

Dave Trojan Biographical Information:

Dave served 21 years in the Navy, retiring in 2000. He lived in Hawaii, Arizona and Mississippi before settling down in Northern California near Travis AFB.
He has a Masters Degree from Embry-Riddle Aeronautical University in Professional Aeronautics and an Associate in Science degree from Honolulu Community College. The Electronics Technicians Association International certified him as a Master Electronics Technician.

After retiring from the military, he started a graduate research project focusing on the contents, environment, and conditions of aircraft crash sites and abandoned WWII airfields, including on the island of Oahu as case studies in aviation archaeology.

He has continued to travel around the country visiting historic aviation sites that include abandoned airfields, crash sites and historic aviation related properties. To date, I have been to over 250+ military aircraft crash sites dating from 1918 to about 1960 in 12 different states.

He has published many article in various magazines and newspaper and is in demand for.lectures Dave is currently assisting the Travis AFB Heritage Center by researching and documenting major events and aircraft accidents during the 1940s to the 1960s.

PLEASE RENEW YOUR MEMBERSHIP

VACAVALLEY RADIO CLUB, INC.

MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely Dues are delinquent January 1st

Name: _____ Call Sign_____

Street:
_____

City: _____Zip:
_____

Phone: (_____) _____-_____OK to Publish ?(_____)

License Class: _____ ARRL Member ?(_____)

E-Mail
Address_____

FAMILY Member (Spouse or Children)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)

MEMBER Dues $20.00 _____
Each Family Member $ 2.00 _____
Student $ 5.00 _____
Repeater/Autopatch donation _____
Call/Name badge $11.00 _____

Optional ARRL membership
ARRL dues $37.00
Total _____

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DATE: _____

Mail to : Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143